

CLAIMS

What is claimed is:

1. 1. A method comprising:
 2. receiving from a requester a request to access an information;
 3. if a link to a first remote computer containing the information is down,
 4. establishing the link while concurrently returning a plurality of imposter responses
 5. until the link is established.
1. 2. The method of Claim 1 wherein the request is a request to access information about a second remote computer identified by a domain name.
1. 3. The method of Claim 1 wherein the plurality of imposter responses comprise a plurality of imposter domain names.
1. 4. The method of Claim 3 wherein returning a plurality of imposter domain names comprises:
 3. appending a text string to the domain name to create a current imposter domain name that is one of the plurality of imposter domain names; and
 5. instructing the requester that the domain name is an alias for the current imposter domain name.
1. 5. The method of Claim 4 further comprising:
 2. recursively receiving from the requester a plurality of requests to access information about a remote computer identified by one of the plurality of imposter domain names; and
 5. if the link remains down, continuing to establish the link, incrementing the current imposter domain name to form a next current imposter domain name of the plurality of imposter domain names, and instructing the requester that the current imposter domain name is an alias for the next current imposter domain name.

- 1 6. The method of Claim 5 further comprising:
2 detecting that the link is established; and
3 after the link is established,
4 converting the current imposter domain name to the domain name; and
5 informing the requester that the imposter domain name is an alias for
6 the domain name.

- 1 7. The method of Claim 6 further comprising:
2 receiving from the requester a second request to access the information after
3 the link is established.

- 1 8. The method of Claim 7 further comprising:
2 after the link is established,
3 forwarding the second request to the first remote computer;
4 receiving a response to the second request; and
5 forwarding the response to the second request to the requester.

- 1 9. The method of Claim 7 wherein the second request is a request to access
2 information about the second remote computer identified by the domain name.

- 1 10. The method of Claim 5 further comprising:
2 determining whether a maximum number of recursions has been exceeded,
3 and if so, returning an appropriate error.

- 1 11. The method of Claim 5 further comprising:
2 determining whether a maximum amount of time has been exceeded, and if so,
3 returning an appropriate error.

- 1 12. The method of Claim 1 wherein the requester is a domain name system (DNS)
2 resolver.

- 1 13. The method of Claim 1 wherein the request is initiated by a local application
2 program.

1 14. The method of Claim 1 wherein the request is initiated by a remote application
2 program.

1 15. The method of Claim 1 wherein the first remote computer is a server.

1 16. The method of Claim 1 wherein the link is a network connection.

1 17. The method of Claim 1 wherein the requester is an Internet web browser, the
2 request is an hypertext transfer protocol (HTTP) "get" instruction, and the plurality of
3 imposter responses comprise at least one temporary web page and at least one HTTP
4 "meta refresh" instruction.

1 18. A method comprising:
2 receiving a domain name system (DNS) request initiated by an application
3 program;
4 if no Internet connection has been established, precluding a user from
5 receiving an error message by establishing a dial-up connection to the Internet while
6 concurrently returning a plurality of imposter domain names until the dial-up Internet
7 connection is established.

1 19. The method of Claim 18 wherein returning comprises:
2 forming a current imposter domain name by appending an information to the
3 domain name; and
4 sending a canonical name (CNAME) response stating that the domain name is
5 an alias for the current imposter domain name.

1 20. The method of Claim 19 further comprising:
2 while establishing the dial-up connection, recursively
3 receiving from the application program a request to access information
4 about a remote computer identified by one of the plurality of imposter domain
5 names;

6 forming a next current imposter domain name of the plurality of
7 imposter domain names by modifying a portion of the information of the
8 current imposter domain name; and
9 sending a CNAME response stating that the current imposter domain
10 name is an alias for the next current imposter domain name.

1 21. The method of Claim 20 further comprising:
2 detecting that the dial-up connection is established; and
3 after the dial-up connection is established,
4 converting the current imposter domain name to the domain name; and
5 sending a CNAME response stating that the current imposter domain
6 name is an alias for the domain name.

1 22. The method of Claim 21 further comprising:
2 receiving from the application program a second request to access information
3 about the remote computer identified by the domain name after the dial-up connection
4 is established.

1 23. The method of Claim 22 further comprising:
2 after the dial-up connection is established,
3 forwarding the second request to a server;
4 receiving a response to the second request; and
5 forwarding the response to the application program.

1 24. A network host comprising a processor and a machine readable medium
2 containing instructions which when executed by the processor cause the processor to
3 perform operations comprising:
4 receiving from a requester a request to access an information;
5 if a link to a first remote computer containing the information is down,
6 establishing the link while concurrently returning a plurality of imposter responses
7 until the link is established.

1 25. The network host of Claim 24 wherein the request is a request to access
2 information about a second remote computer identified by a domain name.

1 26. The network host of Claim 24 wherein the plurality of imposter responses
2 comprise a plurality of imposter domain names.

1 27. The network host of Claim 26 wherein returning a plurality of imposter
2 domain names comprises:
3 appending a text string to the domain name to create a current imposter
4 domain name that is one of the plurality of imposter domain names; and
5 instructing the requester that the domain name is an alias for the current
6 imposter domain name.

1 28. The network host of Claim 27 wherein the instructions cause the processor to
2 perform further operations comprising:
3 recursively receiving from the requester a plurality of requests to access
4 information about a remote computer identified by one of the plurality of imposter
5 domain names; and
6 if the link remains down, continuing to establish the link, incrementing the
7 current imposter domain name to form a next current imposter domain name of the
8 plurality of imposter domain names, and instructing the application program that the
9 current imposter domain name is an alias for the next current imposter domain name.

1 29. The network host of Claim 28 wherein the instructions cause the processor to
2 perform further operations comprising:
3 detecting that the link is established; and
4 after the link is established,
5 converting the current imposter domain name to the domain name; and
6 informing the requester that the imposter domain name is an alias for
7 the domain name.

1 30. The network host of Claim 29 wherein the instructions cause the processor to
2 perform further operations comprising:

3 receiving from the requester a second request to access the information after
4 the link is established.

1 31. The network host of Claim 30 wherein the instructions cause the processor to
2 perform further operations comprising:

3 after the link is established,
4 forwarding the second request to the first remote computer;
5 receiving a response to the second request; and
6 forwarding the response to the second request to the requester.

1 32. The network host of Claim 24 wherein the requester is a domain name system
2 (DNS) resolver.

1 33. The network host of Claim 24 wherein the request is initiated by an
2 application program on the host.

1 34. The network host of Claim 33 wherein the application program is an Internet
2 web browser.

1 35. The network host of Claim 24 wherein the request is initiated by an
2 application program on a remote host.

1 36. The network host of Claim 24 wherein the requester is an Internet web
2 browser, the request is an hypertext transfer protocol (HTTP) "get" instruction, and
3 the plurality of imposter responses comprise at least one temporary web page and at
4 least one HTTP "meta refresh" instruction.